

Amendments to the Specification:

Please insert the enclosed Sequence Listing, immediately following the section of the specification entitled "Abstract of the Disclosure" on page 42.

Please replace the paragraph beginning at page 21, line 24, with the following redlined paragraph:

-- C57BL/6 and B6.C-H-2^{bm12} mice (Jackson Laboratories, Bar Harbor, Me.) were inoculated with a synthetic peptide (Amino acid sequence: KLVVVGARGVGK (SEQ ID NO:1); Microbiological Associates, Bethesda, Md.) which corresponds to residue 5-16 of the p21 protein product of mutated ras proto-oncogene encoding a residue 12 substitution of Arginine (R) for Glycine (G). The peptide was solubilized in distilled water at 1 mg/ml, emulsified in complete Freund's adjuvant (Sigma Co., St. Louis, Mo.) at a ration of 1:1, then injected subcutaneously into the base of the tail using a 25 gauge needle. Alternatively peptide was emulsified with Ribi MPL+TDM+CWS adjuvant (Ribi Immunochem. Res., Hamilton, Mt.) and injected subcutaneously into both hindquarters. Total amount of peptide injected was 50 lg per mouse. Seven days later animals were sacrificed and draining periaortic and inguinal lymph nodes were removed. Lymph nodes, suspended in buffered saline in petri dishes, were teased apart with 18 gauge needles. Dislodged lymphocytes were collected and washed with buffered saline then suspended at 1×10^6 cells per ml in culture medium for use in proliferation assays. --

Please replace the Table 1 beginning at page 25, line 4, with the following redlined table:

Table 1
Bcr-abl Peptide Amino Acid Sequences

		joining point
bcr3-abl2	22 mer*	I V H S A T G F K Q S S K A L Q R P V A S D (SEQ ID NO:2)
bcr3-abl2	18 mer	H S A T G F K Q S S K A L Q R P V A (SEQ ID NO:3)
bcr3-abl2	16 mer	G F K Q S S K A L Q R P V A S D (SEQ ID NO:4)
bcr3-abl2	14 mer	G F K Q S S K A L Q R P V A (SEQ ID NO:5)
bcr3-abl2	12 mer	G F K Q S S K A L Q R P (SEQ ID NO:6)
bcr3	12 mer	I V H S A T G F K Q S S (SEQ ID NO:7)
bcr2-abl2	12 mer	L T I N K E E A L Q R P (SEQ ID NO:8)
BCRI-abl2	14 mer	A F H G D A Q A L Q R P V A (SEQ ID NO:9)

Please replace the paragraph beginning at page 27, line 3, with the following redlined paragraph:

-- BALB/c mice were immunized with a synthetic 12 amino acid peptide identical to the joining region of the p210 protein in K562 CML cells, termed bcr3-abl2 peptide (Table 1). Immunity was validated by the demonstration that host lymph node and splenic lymphocytes from immunized mice proliferated *in vitro* in response to the immunizing peptide but not control peptides (Figure 1). Similar data was generated in the B6 mouse strain. The immunizing peptide, G•F•K•Q•S•S•K•A•L•Q•R•P (SEQ ID NO:6) contained 6 amino acids from bcr (G•F•K•Q•S•S; SEQ ID NO:10), 1 fusion amino acid (K) and 5 amino acids from c-abl (A•L•Q•A•P; SEQ ID NO:11) (Table 1). To examine for fine specificity, the T cell lines were cloned by limiting dilution and maintained by episodic restimulation with the bcr3-abl2 peptide.

All clones were Thy-1.2⁺ CD4⁺ CD8⁻ by analysis with fluoresceinated antibodies. Depending upon which bcr domains are included, the bcr-abl chimeric protein takes two major forms in CML (bcr2-abl2 and bcr3-abl2) and one major form in ALL (BCR1-abl2) (Canaani et al., in A. Deisseroth and R.B. Arlinghaus, eds., Chronic Myelogenous Leukemia: Molecular Approaches to Research and Therapy, Marcel Dekker, New York, Chap. 8, pp. 217-240, 1991; Gehly et al., Blood 78:458-465, 1991; Clark et al., Science 235:85-88, 1987; Kurzrock et al., Nature 325:631-635, 1987; Chan et al., Nature 325:635-637, 1987). In each case, the c-abl sequence of amino acids is identical but is joined with distinct bcr amino acid sequences. Data from 9 representative clones (Table 2) demonstrated that the immune T cells responded specifically to bcr3-abl2 but not to the alternate bcr-abl joining regions of bcr2-abl2 or BCR1-abl2. The immune T cells likewise failed to respond to peptides identical to the isolated amino acid sequence of bcr3 alone. Thus, the immunogenic determinant was specifically associated with the unique 12 amino acid residues of the joining region of the p210^{bcr3-abl2} protein.--